

COMBINED DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name; and

I believe that I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled **OLIGONUCLEOTIDES FOR ENHANCED BIOAVAILABILITY** the specification of which:

☐ is attached hereto.

☒ was filed on April 30, 1998 as International Serial No. PCT/US98/08798 and was amended on May 24, 1999.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose to the U.S. Patent and Trademark Office all information known to be material to the patentability of this application in accordance with 37 CFR § 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a-d) of any **foreign application(s)** for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of any application on which priority is claimed:

Country	Serial Number	Date Filed	Priority Claimed
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose to the U.S. Patent and Trademark Office all information known to be material to patentability as defined in 37 CFR § 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

Serial Number	Date Filed	Status (Patented/Pending/Abandoned)
---------------	------------	-------------------------------------

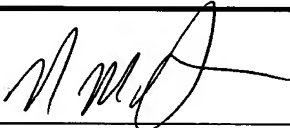
08/847,151April 30, 1997Pending

I hereby appoint the following persons as attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith: **John W. Caldwell and Paul K. Legaard**, Registration Nos. **28,937 and 38,534** of **WOODCOCK WASHBURN KURTZ MACKIEWICZ & NORRIS LLP**, One Liberty Place - 46th Floor, Philadelphia, Pennsylvania 19103 and **Herb Boswell, Laurel Bernstein, Edward D. Robinson and Robert S. Andrews**, Registration Nos. **27,311, 37,280, 43,409, and P44,508**, of **ISIS PHARMACEUTICALS, INC.**, 2292 Faraday Avenue, Carlsbad, California 92008

Address all telephone calls and correspondence to:

Paul K. Legaard
WOODCOCK WASHBURN KURTZ
MACKIEWICZ & NORRIS LLP
One Liberty Place - 46th Floor
Philadelphia PA 19103
Telephone No.: **(215) 568-3100**
Facsimile No.: **(215) 568-3439**

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Name: <u>Nicholas M. DEAN</u>	 Signature
Mailing Address: 2110 Whisperwind Lane Olivenhain, California 92024 <u>CA</u>	Date of Signature: <u>11/16/97</u>
City/State of Actual Residence: Olivenhain, California	Citizenship: <u>United States</u>

Name: <u>2-00</u> C. Frank BENNET	<u>C. Frank Bennett</u> Signature
Mailing Address: 1347 Cassins Street Carlsbad, California 92009 <u>CA</u>	Date of Signature: <u>11-17-99</u>
City/State of Actual Residence: Carlsbad, California	Citizenship: <u>United States</u>

Name: <u>3-00</u> Brett P. MONIA	<u>Brett Monia</u> Signature
Mailing Address: 7605 Nueva Castilla Way La Costa, California 92009 <u>CA</u>	Date of Signature: <u>12/7/99</u>
City/State of Actual Residence: Carlsbad, California	Citizenship: <u>United States</u>

Name: <u>4-00</u> Kenneth DRAPER	<u>Kenneth Draper</u> Signature
Mailing Address: 4791 150 791 Cougar Creek Trail Reno, Nevada 89509 <u>NV</u>	Date of Signature: <u>Nov 11, 1999</u>
City/State of Actual Residence: Reno, Nevada	Citizenship: <u>United States</u>

Name: <u>Kevin P. ANDERSON</u>	<u>Kevin P. Anderson</u> Signature Date of Signature: <u>12/9/99</u> Citizenship: <u>United States</u>
Mailing Address: 2772 La Gran Via Carlsbad, California 92009 <u>CA</u>	
City/State of Actual Residence: Carlsbad, California	

Name: <u>Brenda F. BAKER</u>	<u>Brenda F. Baker</u> Signature <u>12/15/99</u> Date of Signature: <u>Brenda F. Baker</u> Citizenship: <u>United States</u>
Mailing Address: 2147 Avenida Toronja Carlsbad, California 92009 <u>CA</u>	
City/State of Actual Residence: Carlsbad, California	

Name: <u>David J. ECKER</u>	<u>David J. Ecker</u> Signature Date of Signature: <u>12/7/99</u> Citizenship: <u>United States</u>
Mailing Address: 1041 Saxony Road Encinitas, California 92024 <u>CA</u>	
City/State of Actual Residence: Encinitas, California	

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of: Nicholas M. Dean, et al.

U.S. Serial No.: 09/403,539

Group Art Unit: N/A

International Serial Number: PCT/US98/08798

Examiner: N/A

International Filing Date: April 30, 1998

For: Oligonucleotides for Enhanced Bioavailability

Assistant Commissioner for Patents
Washington DC 20231

Sir:

ASSOCIATE POWER OF ATTORNEY

The undersigned, of the firm WOODCOCK WASHBURN KURTZ
MACKIEWICZ & NORRIS LLP, One Liberty Place - 46th Floor, Philadelphia, Pennsylvania
19103, Attorney and/or Agents for Applicant(s), hereby appoints the following:

Robert B. Washburn	Registration No. <u>16,574</u>	Michael P. Straher	Registration No. <u>38,325</u>
Richard E. Kurtz	Registration No. <u>19,263</u>	David A. Cherry	Registration No. <u>35,099</u>
John J. Mackiewicz	Registration No. <u>19,709</u>	Anthony J. Rossi	Registration No. <u>24,053</u>
Norman L. Norris	Registration No. <u>24,196</u>	Terence P. Strobaugh	Registration No. <u>25,460</u>
Albert W. Preston, Jr.	Registration No. <u>25,366</u>	Michael J. Swope	Registration No. <u>38,041</u>
Dale M. Heist	Registration No. <u>28,425</u>	Michael J. Bonella	Registration No. <u>41,628</u>
Philip S. Johnson	Registration No. <u>27,200</u>	Harold H. Fullmer	Registration No. <u>42,560</u>
John W. Caldwell	Registration No. <u>28,937</u>	William R. Richter	Registration No. <u>43,879</u>
Gary H. Levin	Registration No. <u>28,734</u>	John E. McGlynn	Registration No. <u>42,863</u>
Steven J. Rocci	Registration No. <u>30,489</u>	Kimberly R. Hild	Registration No. <u>39,224</u>
Dianne B. Elderkin	Registration No. <u>28,598</u>	Lawrence A. Aaronson	Registration No. <u>38,369</u>
Francis A. Paintin	Registration No. <u>19,386</u>	Jonathan M. Waldman	Registration No. <u>40,861</u>
John P. Donohue, Jr.	Registration No. <u>29,916</u>	Chad Ziegler	Registration No. <u>44,273</u>
Henrik D. Parker	Registration No. <u>31,863</u>	Gwilym J.O. Attwell	Registration No. <u>P45,449</u>
Suzanne E. Miller	Registration No. <u>32,279</u>	David N. Farsiou	Registration No. <u>44,104</u>
Lynn B. Morreale	Registration No. <u>32,842</u>	Maureen Gibbons	Registration No. <u>44,121</u>
Mark DeLuca	Registration No. <u>33,229</u>	Steven H. Meyer	Registration No. <u>37,189</u>
Joseph Lucci	Registration No. <u>33,307</u>	Paul B. Milcetic	Registration No. <u>P46,261</u>
Michael P. Dunnam	Registration No. <u>32,611</u>	Joseph R. Condo	Registration No. <u>42,431</u>
Michael D. Stein	Registration No. <u>34,734</u>	Michael K. Jones	Registration No. <u>41,100</u>
Albert J. Marcellino	Registration No. <u>34,664</u>	Frank T. Carroll	Registration No. <u>42,392</u>
David R. Bailey	Registration No. <u>35,057</u>	Hans J. Crosby	Registration No. <u>44,634</u>
Doreen Yatko Trujillo	Registration No. <u>35,719</u>	Rena Patel	Registration No. <u>41,412</u>
Barbara L. Mullin	Registration No. <u>38,250</u>	Mark J. Rosen	Registration No. <u>39,822</u>
Kevin M. Flannery	Registration No. <u>35,871</u>	Mitchell R. Brustein	Registration No. <u>38,394</u>
Lynn A. Malinoski	Registration No. <u>38,788</u>	Peter M. Ullman	Registration No. <u>43,963</u>

DOCKET NO. ISIS-3013

- 2 -

PATENT

Thomas E. Watson
Gregory L. Hillyer
Maria M. Kourtakis
Richard B. LeBlanc

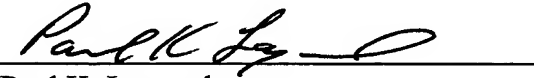
Registration No. 43,243
Registration No. 44,154
Registration No. 41,126
Registration No. 39,495

S. Maurice Valla
Vincent J. Roccia
Robin S. Quartin

Registration No. 43,966
Registration No. 43,887
Registration No. 45,028

his/her associates with full power to prosecute the above-identified application and to transact all business in the Patent Office connected therewith and requests that correspondence continue to be directed to the firm of WOODCOCK WASHBURN KURTZ MACKIEWICZ & NORRIS LLP at the above address.

Date: January 4, 2000


Paul K. Legaard
Registration No. 38,534

Woodcock Washburn Kurtz
Mackiewicz & Norris LLP
One Liberty Place - 46th Floor
Philadelphia PA 19103
Telephone: (215) 568-3100
Facsimile: (215) 568-3439

© 1997 WWKMN